# EAST Search History

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|---|---|---|---|---|---|---|
| L1 | 1715 | 166/372,332.8,319,321.ccls. | US-PGPUB; USPAT; USOCR | AND | OFF | 2008/04/08 10:55 |
| L2 | 1 | L1 valve (sleeve NEAR taper) | US-PGPUB; USPAT; USOCR | AND | OFF | 2008/04/08 10:55 |
| L3 | 10 | "166".clas. valve (sleeve NEAR taper) | US-PGPUB; USPAT; USOCR | AND | OFF | 2008/04/08 10:56 |
| L4 | 3 | "166".clas. (flapper NEAR (taper OR angle OR angled OR beveled)) | US-PGPUB; USPAT; USOCR | AND | OFF | 2008/04/08 11:19 |
| L5 | 36 | "166".clas. (flapper NEAR (sleeve)) | US-PGPUB; USPAT; USOCR | AND | OFF | 2008/04/08 11:23 |
| L6 | 89 | "166".clas. (flapper NEAR (sleeve OR piston OR (flow ADJ tube))) | US-PGPUB; USPAT; USOCR | AND | OFF | 2008/04/08 11:23 |
| S1 | 517 | 166/372.ccls. | US-PGPUB; USPAT; USOCR | AND | OFF | 2008/04/07 14:18 |
| S2 | 16 | S1 flapper (spring OR bias OR biased OR biasing) (sleeve OR piston OR (flow ADJ tube)) | US-PGPUB; USPAT; USOCR | AND | OFF | 2008/04/07 14:19 |
| S3 | 21 | S1 flapper (spring OR bias OR biased OR biasing) | US-PGPUB; USPAT; USOCR | AND | OFF | 2008/04/07 14:30 |
| S4 | 1715 | 166/372,332.8,319,321.ccls. | US-PGPUB; USPAT; USOCR | AND | OFF | 2008/04/07 14:51 |
| S5 | 260 | S4 (choke OR (flow ADJ restrictor)) | US-PGPUB; USPAT; USOCR | AND | OFF | 2008/04/07 14:52 |

| S6 | 54 | S5 flapper | US-PGPUB; USPAT; USOCR | AND | OFF | 2008/04/07 14:52 |
| S7 | 399 | S4 (gas SAME lift) | US-PGPUB; USPAT; USOCR | AND | OFF | 2008/04/07 15:07 |
| S8 | 37 | S7 flapper spring | US-PGPUB; USPAT; USOCR | AND | OFF | 2008/04/07 15:07 |
| S9 | 4 | ("4248308" \| "5004007" \| "5257663" \| "5535828").PN. | US-PGPUB; USPAT; USOCR | AND | OFF | 2008/04/07 15:22 |
| S10 | 54 | lembcke.in. | US-PGPUB; USPAT; USOCR | AND | OFF | 2008/04/07 15:33 |

4/8/2008 12:55:50 PM
C:\Documents and Settings\bharcourt\My Documents\EAST\Workspaces\10593734 method of injecting lift gas into a production tubing.wsp